

AMENDMENTS TO THE SPECIFICATION

On page 36, lines 22-29, please replace the paragraph beginning on line 22 and ending on line 29 with the following amended paragraph:

The sequence for Kv3.4a is in Gene Bank under accession number X62841 (SEQ ID NO:6; gtgcgcttct ctgtcttctt ggggttgggg ggggcgtgtc cccggcccgg agcatccttg tgcctgcctc aaccttctga gaccccgac ccttggatt gaggctcga ccctggctt caccctctgc ctccctagg ttcttctgc caaatccaa ccacctgtgc accacaaaa gccaaactct cctgtccga gccccgggg ggtgggtgg gggggaggca ggggcagagc cactctgcag aagggggcgc caccacctcc tgcctctcc tctccacca cctctctc ctctctgt ctctccctc cccgttctga cgtgcctcc ttgggaaggg tgttggagg gcagcgccg cccaagccg gagccccga gcgcttcta tgatcagctc ggtgtgtgc tctcttacc gcgggcgcaa gtcggggaac aagcctccgt ccaaaacatg tctgaaggag gagatggcca agggcgaggc gtcggagaag atcatcatca acgtggcg cagcgacat gagacctacc gcgaccct gcgcacccta ccgggcaccc gccctgcctg gctggcgat cccgacggcg ggggtcggcc agagtcggat ggcggcggtg caggcagcag cggcagcagc ggcggcgcg ggggctgtga gttctctt gatcggcacc cgggtgttt tgcctatgt ctcaactact accgcacggg caagctgcat tgcctcgag acgtctgtg gcctctctt gaggaagagc tctctctg gggtatcat gagacagatg ttgaacctg ctgtggatg acctaccgc agcaccgca tctgaagag gactggaca tctcgagag cccggacggg ggcgggggtg gcgcaggcc cggcgacgag gctggagacg atgagcgga gttggcctg cagcgcttg gccccatga aggaggctt ggcctgtg ctgggtccg ggttgcct ggtggcagc cccgaatgt ggcgctctc gaggacctg actatccc ggcggccagg gtgtagcct ttgcctct ctctctc ttgttcca ttaccact ctgcctggag acccagagg cctcaacat tgaccgaaat gtgacggaga tccaccgggt aggaatat accagcgtgc gctccggcg ggaggtaga acagaacca ttctacct catcgaggc gtgtgcgtga tgtgttac tctagatt ctggttgc ttgtgtgt cctgatacg ttgacttg tcaagaacct gctcaacat atgcattt tggccatct gccctttac ctggaggtg gattgagtg cctgtcatc aaggcagct gagatgtgt ggttctct cgtgtgtgc gttgtacg cactctcg atctcaagc tcacacgca ctttgggg ctgctgtc tggccacac actccgggc agaccaacg agttctgt gcttctatc ttctggccc tgggtgtgt catcttgg accatgatc attatgtga gcgaatcgg gccaggccat ctgaccacg gggcaatgac cacaccgact tcaagaacat cccatcgt ttctgtgg ctgtgtcac catgacaac cttggctatg gggacatga tctaagaca tggtcaggaa tctgtgtg tgcgtgtgt gactggct gtgtgtaac cattgccat cctgtgctg tcatgtcaa taactttgt atgtactact ccctggctat ggccaagcag aagcttcca agaaacgaa gaagcatga ccacggccac

cccagcttga gtcacccatt tactgcaagt ctgaggagac ttcaccccg gacagcacct acagtgacac cagccccct
 gcccgggaag agggatatgt cgagaggaaa cgagcagact ccaagcagaa tggtagcgt aatgcgggtg tgtccgatga
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 gggacagaaa caagaaggca gctgcctgct tctgtctcag tctggggac tatgcctgtg ctgatggcag tgtccagaaa
 gaaggcagtg ttgagccgaa agcgtgcgtc ccagtgtctc acacctgtgc tcttaaaaca cagagacctg ccaagacgcc
 ctctcgtcca actatgccca tctgaagtc ctacccctct cttagagcgg caccaacgtg agaaagacag acagacagaa
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 ggaaaaatct cccatgcaac tctcagggcc cagagccatc tgggtctgat actctgttct actgtacatt gaagagacat atatgcacat
 atagtatcta tattcatata tactatatac tctgtgtgt agtgacgtg ctactgggtg tctgtctca tcgttaggct atgtctcca
 agtcctctgc ccacctgtt tccccacccc ctcttcttc atggattgtt tcttctgacc atgttttgg agtgtcccag gagaggtata
 cctgggacct gcccctccag ctgggtggc ccaggctgct ctacttggg ggtgtccct gccagcaggt ggcctgctga
 agtcagttga aggcacgatt gcccttctgg ggtcactgct tctactagc). The sequence for Kv3.4c is identical to the

Kv3.4a sequence except that 62 bp (position 2222-2283) of Kv3.4a are absent in Kv3.4c. As a result of this alternative splicing, the first 608 amino acids of both variants are identical, but the last 17 (for variant a) and 19 (for variant c) amino acids are completely different. Both variants are described by Rudy and colleagues in Veaga-Saenz de Miera E. et al. (1993) Shaw-related K channels in mammals. in Handbook of Membrane Channels: Molecular and Cellular Physiology. (Peracchia C, ed. Academic Press, Orlando) pp 41-78.